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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,091	07/25/2001	Timothy M. Schmidl	TI-31670	5570

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EXAMINER	
DANIEL JR, WILLIE J	

ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
03/10/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@ti.com

Office Action Summary	Application No.	Applicant(s)	
	09/915,091	SCHMIDL ET AL.	
	Examiner	Art Unit	
	WILLIE J. DANIEL JR	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 December 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *37-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *37-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date. _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's amendment filed on 17 December 2009. **Claims 37-42** are now pending in the present application and **claims 1-36** are canceled. The BPAI decision has affirmed prior rejection of claims 1, 5-13, 16-17, 19, and 21 (i.e., appealed claims 1-3 and 5-32). This office action is made **Final**.

Claim Objections

2. The objection applied to the claims is withdrawn.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 37 (including dependent claims 38-42) is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

a. **Claim 37** recites the limitation "…to **successive** narrow band…" in line(s) 3-5 of the claim.

Regarding **claim 37**, the claim(s) recite(s) a limitation that is not supported by the instant application as originally filed. The applicant failed to provide support (i.e., page(s),

line(s), and drawing(s)) for the newly added claims. The applicant is advised to review the subject matter of the specification (see pg. 8, lines 3-6; pg. 9, lines 19-21), which basically describes narrow band. Applicant is advised to clearly and concisely provide claim language that is consistent and correlates to the specification and mindful not to improperly utilized language that is clearly not supported. The Examiner respectfully requests the applicant to provide page(s), line(s), and figure(s) of the instant application that supports the limitation of the claim(s) and/or any supportive comment(s) to help clarify and resolve this issue(s).

4. Due to the 112 rejection of the current claim language, the Examiner has given a reasonable interpretation of said language and the claims are rejected as broadest and best interpreted. In addition, applicant is welcome to point out where in the specification the Examiner can find support for this language if Applicant believes otherwise.

5. This list of examples is not intended to be exhaustive. The Examiner respectfully requests the applicant to review all claims and clarify the issues as listed above as well as any other issue(s) that are not listed.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Van De Berg** (hereinafter Berg) (**US 5,907,812**) with further support by **Salonaho et al**. (hereinafter Salonaho) (**US 6,594,495 B2**).

Regarding **claim 37**, Berg discloses a process of selecting a wide band channel (see abstract; col. 2, line 65 - col. 3, line 6; col. 3, lines 38-48; Figs. 2 & 4), where the radio communications system has carrier frequency bands, comprising:

determining that a wide band channel (e.g., C^1) should be selected (see col. 3, lines -6, 11-17; col. 5, lines 8-12; col. 9, lines 9-30; Figs. 2, 4, & 7-9);

tuning a filter to successive narrow band channels (e.g., $C_{2\text{-}6}$) within one wide band channel (see abstract; col. 2, line 65 - col. 3, line 6; col. 3, lines 38-48; col. 4, lines 27-39; col. 5, line 52 - col. 6, line 2; col. 6, lines 20-40; col. 7, lines 48-65; col. 9, lines 4-17; col. 12, lines 41-51; Figs. 2, 4, & 7-9) and a filter would be implicit in order to process each of the available bands in which a filter must be tuned to each available frequency band (see abstract; col. 9, lines 3-21; col. 12, line 40 - col. 13, line 5; Figs. 2, 4, & 7-9);

passively observing each of the successive narrow band channels for at least one of quality, interference, and received signal strength indication (see abstract; col. 2, line 65 - col. 3, line 17; col. 3, lines 38-48; col. 4, lines 27-39; col. 6, lines 29-39; col. 7, lines 48-65; col. 9, lines 4-17; Figs. 2, 4, & 7-9), where the system measures interference and scans;

summing the observations of the all of the successive narrow band channels of the one wide band channel (see col. 6, lines 29-39; col. 9, lines 4-44; Fig. 7 “ref. 2-6”), where the results of the scanning are combined to determine an interference-free frequency band of the carrier frequency bands;

repeating the steps of tuning, passively observing, and summing for another wide band channel (see abstract; col. 9, lines 3-21; col. 12, line 40 - col. 13, line 5; Figs. 2, 4, & 7-9); and

selecting the one or the other wide band channel for wireless communication between devices based on the summed observations of each wide band channel (see abstract; col. 3, lines 1-6, 11-17; col. 5, lines 8-12; col. 5, line 52 - col. 6, line 2; col. 9, lines 9-30; col. 12, lines 41-60; Figs. 2, 4, 7-9, & 11-13), where the bandwidth (e.g., 1 MHz & 5 MHz) of the at least one available frequency band is selected, if deemed acceptable, to form, by itself or in combination with other acceptable available frequency bands, the at least one frequency band for the desired communication (see col. 7, lines 19-32; col. 8, lines 50-56; col. 9, lines 1-30; Fig. 7). Berg clearly discloses the feature(s) as indicated above as evidenced by the fact that one of ordinary skill in the art would clearly recognize. However, the examiner maintains that the feature(s) summing the observations was well known in the art, as taught by Salonaho.

As further support in the same field of endeavor, Salonaho at the least discloses the feature summing the observations (see col. 3, lines 38-54; col. 4, lines 9-14; col. 1, lines 34-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Berg as further supported by Salonaho to have the feature summing the observations, in order to provide a method and system in which a load can be optimally controlled to prevent overload situations and improve connection quality, as taught by Salonaho (see col. 2, lines 23-29).

Regarding **claim 38**, the combination of Berg and Salonaho discloses every limitation claimed, as applied above (see claim 37), in addition Berg further discloses process of claim 37 in which the tuning includes tuning a filter to every narrow band channel in the one wide band channel (see abstract; col. 9, lines 3-21; col. 12, line 40 - col. 13, line 5; Figs. 2, 4, & 7-9), where the tuning a filter would be implicit in order to process each of the available bands a filter must be tuned to each available frequency band.

Regarding **claim 39**, the combination of Berg and Salonaho discloses every limitation claimed, as applied above (see claim 37), in addition Berg further discloses the process of claim 37 in which the tuning includes tuning a filter to only some of the narrow band channels in the one wide band channel (see col. 2, line 65 - col. 3, line 7; col. 5, line 21 - col. 6, line 2; col. 14, lines 1-8; Figs. 10-13).

Regarding **claim 40**, the combination of Berg and Salonaho discloses every limitation claimed, as applied above (see claim 37), in addition Berg further discloses the process of claim 37 in which the determining includes determining periodically that a wide band channel should be selected (see col. 3, lines -6, 11-17; col. 5, lines 8-12; col. 9, lines 9-30; Figs. 2, 4, & 7-9).

Regarding **claim 41**, the combination of Berg and Salonaho discloses every limitation claimed, as applied above (see claim 37), in addition Berg further discloses the process of claim 37 in which the determining includes determining that a wide band channel should be selected in response to an unacceptable communication quality in an existing wide band channel (see abstract; col. 3, lines 1-6, 11-17; col. 5, lines 8-12; col. 5, line 52 - col. 6, line 2; col. 9, lines 9-30; col. 12, lines 41-60; Figs. 2, 4, 7-9, & 11-13), where the bandwidth (e.g., 1

MHz & 5 MHz) of the at least one available frequency band is selected, if deemed acceptable, to form, by itself or in combination with other acceptable available frequency bands, the at least one frequency band for the desired communication (see col. 7, lines 19-32; col. 8, lines 50-56; col. 9, lines 1-30; Fig. 7).

Regarding **claim 42**, the combination of Berg and Salonaho discloses every limitation claimed, as applied above (see claim 37), in addition Berg further discloses the process of claim 37 in which the determining includes determining that a wide band channel should be selected in response to selection of an application requiring a different wide band channel (see col. 3, lines -6, 11-17; col. 5, lines 8-12; col. 9, lines 9-30; Figs. 2, 4, & 7-9).

Response to Arguments

7. Applicant's arguments with respect to claims 37-42 have been considered but are moot in view of the new ground(s) of rejection necessitated by the new claims.

In response to applicant's arguments, the Examiner respectfully disagrees as the applied reference(s) provide more than adequate support and to further clarify (see the above claims for relevant citations).

8. The Examiner requests applicant to provide support (e.g., page(s), line(s), and drawing(s) as well as comments) for the amended claim language and any further amended claim language.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIE J. DANIEL JR whose telephone number is (571)272-7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WJD,Jr/

WJD,Jr
02 March 2010

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617